

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant	Thomas D. Judd	REPLY BRIEF
Serial No.	10/782,519	
Filing Date	2/18/2004	
Confirmation No.	4712	
Examiner Name	Ryan J Jakovac	
Group Art Unit	2445	
Attorney Docket No.	H0006282-5435	
Title: SYSTEMS AND METHOD FOR ENCODING AND DECODING DATA MESSAGES		

REMARKS

In the Examiner's Answer mailed October 16, 2009, the Examiner presented a number of comments in response to arguments in Appellant's Appeal Brief submitted on May 27, 2009. Appellant provides the following arguments in response to the Examiner's Answer:

I. In addressing Appellant's argument that Tidwell fails to teach or suggest a Configuration Information File (CIF), the Examiner continues to confuse the encoding/decoding rules with the CIF which is a mechanism for implementing the encoding/decoding rules. Tidwell clearly explains the difference between the encoding/decoding rules and the mechanism for implementing them. In particular, Tidwell states "The ADEP 310 translates a data structure within the application program 305 into a stream of bytes *in accordance with* an ASN.1 specification and a set of encoding rules. The encoding rules can include, but are not limited to, BER and PER. The BER *are defined in* CCITT Recommendation X.209, 'Specification of Basic Encoding Rules (BER) for Abstract Syntax Notation One(ASN.1)' (Geneva, Switzerland, 1987) ... The PER *are described in* ISO/IEC CD ATA 25-2, 'Packed Encoding Rules' (June 1991)." Paragraph [0034] (emphasis added). In other words, the

encoding/decoding rules, such as BER and PER, are intangible rules that are defined in corresponding standards or specifications.

In order to use the rules, a mechanism is needed to implement the rules. For example, Tidwell states “The ADEP 310 translates a data structure ... in accordance with an ASN.1 specification and a set of encoding rules.” With respect to the ADEP, Tidwell states “In order to perform this function, the ADEP 310 includes *routines written in the same programming language* as the application program 305 for encoding a data structure produced by the application program 305 into an ASN.1 message and decoding an ASN.1 message into a data structure understandable by the application program.” Paragraph [0034] (emphasis added). Tidwell also states that “the ADEP 310 can be produced by an ASN.1 compiler” and “the output of the compiler is source code which is again compiled with the application program 305.” Paragraph [0035]. Thus, the mechanism for implementing the encoding/decoding rules in Tidwell involves source code, similar to the prior approaches discussed in the present application.

However, the mechanism for implementing encoding/decoding as claimed in the present application involves the use of a CIF rather than source code. For example, the present application states

The CIF *defines uplink message definition* based on the ASN.1 schema. The CIF is tree-based and table driven to *define message syntax*. The CIF also *defines what actions are to be taken* or can be taken with the message (e.g. display including format, print including format, responses, pilot actions, etc.)

paragraph [0031] (emphasis added). In addition, with respect to one embodiment of a decoder for decoding a message, the present application discusses “the grammar interpreter 154 access the stored CIF via interface 156 to determine the syntax with which the message should be interpreted. The grammar interpreter 154 also retrieves the action to be performed from the CIF via interface 156.” Paragraph [0040]. With respect to one embodiment of an encoder, the present application states “The message parser/encoder 152 then encodes the message in either the BER or PER *as indicated in the CIF* definition for the given the message.” Paragraph [0042] (emphasis added). Thus, whereas Tidwell relies on source code and compilers for implementing the

encoding/decoding rules, the present application, as claimed in the present claims, use a CIF to implement the encoding/decoding rules. Therefore, the discussion of encoding/decoding rules in Tidwell does not teach or suggest a CIF as described and claimed in the present application.

II. Appellant respectfully maintains that the MAG module in Schwartz is not a CIF as described and claimed in the present application. However, even assuming, for the sake of argument, that the parsing action of a MAG module in Schwartz meets the definition of a CIF, which Appellant does not concede, one of skill in the art would not find it obvious to combine Tidwell and Schwartz.

In particular, the MAG module in Schwartz is only discussed in the context of “using the format specification to parse the message *into its various fields* and reading the information from the various fields.” Col. 16, lines 61-63 (emphasis added). ASN.1 notation, however, does not use pre-defined structured fields like those discussed in Schwartz where the type of data is dependent on the order (as shown in Fig. 9 of Schwartz). For example, in ASN.1 notation, the message itself can define the type of variable and length of the variable as well as the value. See John Larmouth, ASN.1 Complete, pages 29-30 (Open Systems Solutions 1999) available at <<http://www.oss.com/asn1/larmouth.html>>.

Thus, one of ordinary skill in the art would not be motivated to modify Tidwell to include the MAG module of Schwartz since such a combination would be inoperable. In particular, since ASN.1 messages do not have pre-defined structured fields, use of the MAG module, which relies on pre-defined structured fields, from Schwartz in Tidwell would not enable Tidwell to encode/decode ASN.1 messages. The Examiner’s Answer did not address this argument in Appellant’s appeal brief regarding the combination of Schwartz and Tidwell.

For the reasons stated above and in Appellant’s appeal brief filed on May 27, 2009, Tidwell and Schwartz, taken alone or in combination, fail to teach or suggest all the claimed limitations of the pending claims. Nothing in the Applicant’s Admitted Prior Art

or Allison cures the defects of Tidwell and Schwartz. Therefore, Appellant respectfully requests that the rejections be reversed.

Respectfully submitted,

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